

Date of meeting: 2022-09-24

Time: 9pm-10pm

Note taker: Tevan

Agenda: Discuss tech stack and A1 details

Notes:

Database:

- we will use SQLite because it's strongly recommended for this assignment

Frontend technology comparison:

React (we decided to use this)

- all 3 of us have experience with React (but little experience with Angular, Vue, etc)
- easier to divide work since component based (Cynthia)
- good ui library basis (CSS stuff) (Cynthia)
- good libraries (Material UI, Recharts, etc) available for integration (data visualization, use as base for building custom components) (Cynthia)
- can use Next.js to streamline development (Tevan)
- reported to have poor documentation

Angular

- Google's support stopped in June 30, 2021 (Tevan)

Vue

- good for dashboard-based application (Tevan)
- compared to react, adoption is lower and not as many libraries are compatible (Tevan)
- Tevan didn't have a great experience developing/maintaining project with Vue (again lower degree of support)
- Provides ready-made solutions e.g. routing, so you don't need to use third-party libraries for that unlike React (Sung Hyun)

Backend technology comparison:

Node & Express js (we decided to use this)

- Great integration for React (classic MERN stack) (Tevan)

- Also in JavaScript, less development overhead (Tevan)
- can easily integrate packages with npm/yarn (Cynthia)
- Express: database-integration (including for SQLite and Elasticsearch - free data search engine)

Flask

- different language then front-end -> slightly greater development overhead
- Rapid development, more Pythonic than Django (Sung Hyun)
- negative experience working with it in a past project (Cynthia)

Django:

- more documentation compared to Flask (Sung Hyun)
- for larger projects (less ideal for small scale) (Cynthia)

Container technology: (Tevan will handle)

Docker: (we decided to use this)

- the clear choice - widely supported in Cloud Engineering practices (Tevan)

CI / CD technology:

Github: (we decided to use this)

- convenient since we are working with Github Repos (Tevan)

Jenkins

- Negative experience setting up with it (Sung Hyun)

Travis

- Easier to setup than Jenkins (Sung Hyun)

Todo

Before the next meeting (Tuesday 7:30pm - est. 1 hour)

Everyone:

- research interesting datasets to work with and questions we can answer through visualization of the data

Tevan:

- handle Docker setup

Cynthia:

- Setup for React and Node/Express js

Sung Hyun

- setup CI / CD

Agenda for next meeting

- present interesting dataset, decide on what data to use /questions to be answered
- discuss what goals to achieve for each milestone